

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/014151 A1

(51) International Patent Classification⁷: A23L 1/164.
A21D 2/16, A23L 1/30

(21) International Application Number:
PCT/EP2003/008356

(22) International Filing Date: 29 July 2003 (29.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02017803.4 7 August 2002 (07.08.2002) EP

(71) Applicant (for all designated States except US): NESTEC
S.A. [CH/CH]; Av. Nestlé 55, CH-1800 Vevey (CH).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SIEVERT, Birgit
[DE/CII]; 1. Chemin de la Pierraz, CII-1066 Epalinges
(CH).

(74) Agent: RAULINE, Mathilde; Av. Nestlé 55, CH-1800
Vevey (CH).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CEREAL BASED FOOD PRODUCT COMPRISING DHA AND/OR EPA

(57) Abstract: The invention relies on cereal based food product having a water activity between 0.2 and 0.4 and comprising encapsulated DHA and/or EPA and citrus flavour, with no off-taste and odour. The food product is preferably shaped as a bar.

WO 2004/014151 A1

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08356

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23L1/164 A21D2/16 A23L1/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23L A21D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, FSTA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	LAURITZEN D: "Food enrichment with marine omega-3 fatty acids." INTERNATIONAL FOOD INGREDIENTS 1994, no. 1/2, 1994, pages 41-44, XP008012422	1-11, 14, 15
Y	the whole document	12, 13
Y	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 02, 28 February 1997 (1997-02-28) & JP 08 275728 A (NEW AQUA GIJUTSU KENKYUSHO:KK;NIPPON KAGAKU SHIRYO KK), 22 October 1996 (1996-10-22)	1-11, 14, 15
Y	abstract	12, 13
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

17 November 2003

Date of mailing of the international search report

09/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Vuillamy, V

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/08356

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 14 and 15 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08356

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0102330 A1 (MANNING PAUL B ET AL) 1 August 2002 (2002-08-01) page 8, left-hand column, paragraph 2 page 9, left-hand column, paragraph 1 - paragraph '0002! page 10, right-hand column, paragraph 4 page 11, left-hand column, paragraph 6 example claim 37	12, 13
A	----- WO 01 84961 A (HAGEMAN ROBERT JOHAN JOSEPH ;NUTRICIA NV (NL); KILIAAN AMANDA JOHA) 15 November 2001 (2001-11-15) examples 2-5	1
A	----- DATABASE FSTA 'Online! INTERNATIONAL FOOD INFORMATION SERVICE (IFIS), FRANKFURT-MAIN, DE; 2000, KOLANOWSKI W ET AL: "New food product containing polyunsaturated fatty acids omega -3 EPA, DHA - sensory quality and possibility of diet supplementation." XP002261492 Database accession no. 2000-00-g0336 abstract & ROCZNIKI PANSTWOWEGO ZAKLADU HIGIENY, vol. 50, no. 4, 1999, pages 427-434, KATEDRA SUROWCOW ZYWNOSCIOWYCH I TOWAROZNAWSTWA, WYDZIAŁ ZYWIENIA CZŁOWIEKA ORAZ GOSPODARSTWA DOMOWEGO, SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO, UL. NOWOURSYNOWSKA 166, 02-787 WARSAW, POLAND	1
A	----- US 4 451 488 A (COOK MILTON L ET AL) 29 May 1984 (1984-05-29) column 2, line 50 - line 52 examples I,II	1, 12
A	----- PATENT ABSTRACTS OF JAPAN vol. 2000, no. 11, 3 January 2001 (2001-01-03) & JP 2000 217512 A (BERURICCHI:KK;SUGOU:KK), 8 August 2000 (2000-08-08) abstract	1
A	----- PATENT ABSTRACTS OF JAPAN vol. 008, no. 205 (C-243), 19 September 1984 (1984-09-19) & JP 59 095860 A (SHINOZAKI KOURIYOU KK), 2 June 1984 (1984-06-02) abstract	1
	----- -/--	

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08356

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 296 117 A (WARNER LAMBERT CO) 21 December 1988 (1988-12-21) cited in the application claims; examples -----	1
A	US 6 235 331 B1 (KATAOKA HISASHI ET AL) 22 May 2001 (2001-05-22) column 1, line 54 - column 4, line 3 column 6, line 31 - line 53 -----	1
A	WO 01 51088 A (CINCOTTA ANTHONY) 19 July 2001 (2001-07-19) example 1 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/08356

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 08275728	A	22-10-1996	NONE
US 2002102330	A1	01-08-2002	US 2002150607 A1 17-10-2002 US 2002192265 A1 19-12-2002 US 2003108594 A1 12-06-2003
WO 0184961	A	15-11-2001	AU 5511401 A 20-11-2001 CA 2408032 A1 15-11-2001 CN 1440240 T 03-09-2003 EP 1282365 A2 12-02-2003 WO 0184961 A2 15-11-2001 US 2002040058 A1 04-04-2002
US 4451488	A	29-05-1984	NONE
JP 2000217512	A	08-08-2000	JP 3443767 B2 08-09-2003
JP 59095860	A	02-06-1984	JP 1295920 C 26-12-1985 JP 60018382 B 10-05-1985
EP 0296117	A	21-12-1988	US 4853247 A 01-08-1989 AU 598382 B2 21-06-1990 AU 1748588 A 22-12-1988 DK 326088 A 17-12-1988 EP 0296117 A2 21-12-1988 FI 882804 A 17-12-1988 JP 1023851 A 26-01-1989 NO 882631 A 19-12-1988 NZ 224681 A 28-08-1990 PH 24795 A 30-10-1990 PT 87726 A ,B 01-07-1988 ZA 8803656 A 02-12-1988
US 6235331	B1	22-05-2001	NONE
WO 0151088	A	19-07-2001	WO 0151088 A1 19-07-2001 US 2002146400 A1 10-10-2002